

Title (en)

PLANAR MOSFET WITH TEXTURED CHANNEL AND GATE

Title (de)

PLANARES MOSFET MIT TEXTURIERTEM KANAL UND GATE

Title (fr)

TRANSISTOR À EFFET DE CHAMP SEMI-CONDUCTEUR À OXYDE MÉTALLIQUE (MOSFET) PLAN AVEC CANAL TEXTURÉ ET GÂCHETTE

Publication

EP 2507838 A2 20121010 (EN)

Application

EP 10834973 A 20101124

Priority

- US 26569009 P 20091201
- US 2010058069 W 20101124

Abstract (en)

[origin: WO2011068737A2] A semiconductor device is disclosed that includes a semiconductor substrate having a channel region and respective source and drain regions formed on opposite sides of the channel region. The channel region includes at least one pore. A gate is formed on the semiconductor substrate between the source and drain regions and includes at least one pin received by respective ones of the at least one pore. A dielectric layer is disposed between the gate and the semiconductor substrate.

IPC 8 full level

H01L 29/78 (2006.01); **H01L 21/336** (2006.01)

CPC (source: EP US)

H01L 29/1037 (2013.01 - EP US); **H01L 29/1054** (2013.01 - EP US); **H01L 29/165** (2013.01 - EP US); **H01L 29/66575** (2013.01 - EP US); **H01L 29/66787** (2013.01 - EP US); **H01L 29/78** (2013.01 - EP US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2011068737 A2 20110609; **WO 2011068737 A3 20111124**; CN 102648523 A 20120822; EP 2507838 A2 20121010; US 2012286330 A1 20121115; US 8487367 B2 20130716

DOCDB simple family (application)

US 2010058069 W 20101124; CN 201080054829 A 20101124; EP 10834973 A 20101124; US 201013513089 A 20101124